## AMENDMENTS TO THE CLAIMS

Claims 1-30 are pending in the instant application. Claims 2-20 and 22-30 have been amended. The Applicant requests reconsideration of the claims in view of the following amendments reflected in the listing of claims.

## Listing of claims:

1. (Original) A method for providing and configuring communication links, the method comprising:

determining any one usable media pair from all existing media pairs; selecting any one channel from all existing channels; and assigning said selected any one channel to said any one media pair.

- (Currently amended) The method according to claim 1, wherein said determining further comprises monitoring at least said any one usable media pair.
- (Currently amended) The method according to claim 2, wherein said monitoring further comprises detecting an existence of a communication signal on said any one usable media pair.

- (Currently amended) The method according to claim 1, further comprising determining which one of said all existing media pairs is capable of facilitating communication at a maximum communication speed.
- (Currently amended) The method according to claim 4, further comprising cross-connecting said selected any one channel to said one of said all existing media pairs capable of facilitating communication at a maximum communication speed.
- (Currently amended) The method according to claim 1, further comprising determining which one of said all existing media pairs is capable of operating at a reduced communication speed.
- (Currently amended) The method according to claim 6, further comprising cross-connecting said selected any one channel to said one of said all existing media pairs capable of operating at said reduced communication speed.
- 8. (Currently amended) The method according to claim 1, further comprising:

flipping at least one of a channel and a media pair assignment of a previously defined general channel and media pair configuration which defines channel and media pair assignments for at least a portion of said all existing media pairs; and

defining said flipped at least one said channel and said media pair assignment as a default channel and media pair configuration.

- 9. (Currently amended) The method according to claim 1, further comprising identifying a status of at least one of said all existing media pairs and at least one of said all existing channels.
- (Currently amended) The method according to claim 9, further comprising storing said identified status.
- 11. (Currently amended) A machine-readable storage having stored thereon, a computer program having at least one code section for providing and configuring communication links, the at least one code section being executable by a machine for causing the machine to perform steps comprising:

determining any one usable media pair from all existing media pairs; selecting any one channel from all existing channels; and assigning said selected any one channel to said any one media pair.

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12. (Currently amended) The machine-readable storage according to

claim 11, further comprising code for monitoring at least said any one usable

media pair.

13. (Currently amended) The machine-readable storage according to

claim 12, further comprising code for detecting an existence of a communication

signal on said any one usable media pair.

14. (Currently amended) The machine-readable storage according to

claim 11, further comprising code for determining which one of said all existing

media pairs is capable of facilitating communication at a maximum communication

speed.

15. (Currently amended) The machine-readable storage according to

claim 14, further comprising code for cross-connecting said selected any one

channel to said one of said all existing media pairs capable of facilitating

communication at a maximum communication speed.

16. (Currently amended) The machine-readable storage according to

claim 11, further comprising code for determining which one of said all existing

media pairs is capable of operating at a reduced communication speed.

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17. (Currently amended) The machine-readable storage according to claim 16, further comprising code for cross-connecting said selected any one channel to said one of said all existing media pairs capable of operating at said

reduced communication speed.

18. (Currently amended) The machine-readable storage according to

claim 11, further comprising:

flipping at least one of a channel and a media pair assignment of a previously defined general channel and media pair configuration which defines

channel and media pair assignments for at least a portion of said all existing media

pairs; and

defining said flipped at least one said channel and said media pair

assignment as a default channel and media pair configuration.

19. (Currently amended) The machine-readable storage according to

claim 11, further comprising code for identifying a status of at least one of said all

existing media pairs and at least one of said all existing channels.

20. (Currently amended) The machine-readable storage according to

claim 19, further comprising code for storing said identified status.

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(Original) A system for providing and configuring communication links, the system comprising:

at least one controller adapted to determine any one usable media pair from all existing media pairs;

at least one selector adapted to select any one channel from all existing channels; and

said at least one controller adapted to assign said selected any one channel to said any one media pair.

- (Currently amended) The system according to claim 21, wherein said at least one controller is further adapted to determine at least said any one usable media pair.
- 23. (Currently amended) The system according to claim 22, wherein said at least one controller further comprises a detector adapted to detect an existence of a communication signal on said any one usable media pair.
- (Currently amended) The system according to claim 21, wherein said at least one controller is further adapted to determine which one of said all existing

media pairs is capable of facilitating communication at a maximum communication speed.

- 25. (Currently amended) The system according to claim 24, wherein said selector is further adapted to cross-connect said selected any one channel to said one of said all existing media pairs capable of facilitating communication at a maximum communication speed.
- 26. (Currently amended) The method according to claim 21, wherein said at least one controller is further adapted to determine which one of said all existing media pairs is capable of operating at a reduced communication speed.
- 27. (Currently amended) The system according to claim 26, wherein said selector is further adapted to cross-connect said selected any one channel to said one of said all existing media pairs capable of operating at said reduced communication speed.
- 28. (Currently amended) The system according to claim 21, wherein said selector is further adapted to flip at least one of a channel and a media pair assignment of a previously defined general channel and media pair

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configuration which defines channel and media pair assignments for at least a portion of said all existing media pairs; and

said controller is further adapted to define said flipped at least one said channel and said media pair assignment as a default channel and media pair configuration.

- 29. (Currently amended) The system according to claim 21, wherein said at least one controller is further adapted to identify a status of at least one of said all existing media pairs and at least one of said all existing channels.
- (Currently amended) The system according to claim 29, further comprising at least one register adapted to store said identified status.